



Forest Health Protection, Southern Region

COTTONWOOD TWIG BORER,

Gypsonoma haimbachiana (Kft.)

Importance. - The cottonwood twig borer is widely distributed throughout the eastern United States, from Canada to the Gulf states and west to Missouri. It is one of the most destructive insects of young cottonwood. Other poplars are also hosts. Terminal shoot injuries cause serious stunting, forks, crooks, and other malformations. This leads to reduction in the quality and quantity of merchantable pulpwood, sawlogs, or veneer.

Identifying the Insect. - The adult is ash gray and has wingspread of 1/2 to 7/10 inch (13 to 17 mm). The basal portion of the forewing is darker than the apical. Fullgrown larvae are pale, with a brown-yellow head. They are from 2/5 to 1/2 inch (10 to 13 mm long).

Identifying the Injury. - Larvae bore into the terminals and branch ends of the host. They frequently kill the bud and up to 10 inches (25 cm) of the terminal. Often the old dead terminal remains intact on the tree for several months after the larvae have emerged. A stunted, deformed, limby tree is a good indication of cottonwood twig borer damage.



Damage on cottonwood.

Biology. - The female moth lays eggs on the upper surface of leaves along the midrib, alone or in groups of two to eight. Hatching occurs in about 5 days. The young larvae cover themselves with silk mixed with trash, then bore into the midrib. After about 3 days the larvae abandon their midrib galleries and move to tender shoots where they tunnel in and complete their larval development. Larvae reach maturity in about 21 to 23 days and move down the trunk, where they spin cocoons in sheltered bark crevices or litter or between leaf folds. Adult moths emerge in 8 or 9 days. It takes from 40 to 45 days to complete the life cycle in midsummer. There are four or more generations per year in the South.

Control. - The most effective natural control is a potter wasp, which tears open tender cottonwood shoots and removes twig borer larvae from their galleries. Other wasps also parasitize twig borer larvae. Direct control can be obtained through the use of soil-applied systemic insecticides.
